

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	12	US-5536699-\$.DID. OR US-5470542-\$.DID. OR US-5417939-\$.DID. OR US-5770770-\$.DID. OR US-5113015-\$.DID. OR US-4352940-\$.DID.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/18 08:11
L2	31	"0127062"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/18 08:45
L3	1247	reactive adj distillation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/18 08:46
L4	204	prereactor	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/18 08:47
L5	9	I3 same I4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/18 09:47
L7	681	562/606.ccis.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/18 09:47
L8	4	I3 and I7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/18 09:47

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID : SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * * * * * Welcome to STN International * * * * * * * * * * * * * * *

| | | |
|---------|--------|--|
| NEWS 1 | | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS 2 | | "Ask CAS" for self-help around the clock |
| NEWS 3 | AUG 09 | INSPEC enhanced with 1898-1968 archive |
| NEWS 4 | AUG 28 | ADISCTI Reloaded and Enhanced |
| NEWS 5 | AUG 30 | CA(SM)/CAplus(SM) Austrian patent law changes |
| NEWS 6 | SEP 11 | CA/CAplus enhanced with more pre-1907 records |
| NEWS 7 | SEP 21 | CA/CAplus fields enhanced with simultaneous left and right truncation |
| NEWS 8 | SEP 25 | CA(SM)/CAplus(SM) display of CA Lexicon enhanced |
| NEWS 9 | SEP 25 | CAS REGISTRY(SM) no longer includes Concord 3D coordinates |
| NEWS 10 | SEP 25 | CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine |
| NEWS 11 | SEP 28 | CEABA-VTB classification code fields reloaded with new classification scheme |
| NEWS 12 | OCT 19 | LOGOFF HOLD duration extended to 120 minutes |
| NEWS 13 | OCT 19 | E-mail format enhanced |
| NEWS 14 | OCT 23 | Option to turn off MARPAT highlighting enhancements available |
| NEWS 15 | OCT 23 | CAS Registry Number crossover limit increased to 300,000 in multiple databases |
| NEWS 16 | OCT 23 | The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded |
| NEWS 17 | OCT 30 | CHEMLIST enhanced with new search and display field |
| NEWS 18 | NOV 03 | JAPIO enhanced with IPC 8 features and functionality |
| NEWS 19 | NOV 10 | CA/CAplus F-Term thesaurus enhanced |
| NEWS 20 | NOV 10 | STN Express with Discover! free maintenance release Version 8.01c now available |
| NEWS 21 | NOV 13 | CA/CAplus pre-1967 chemical substance index entries enhanced with preparation role |
| NEWS 22 | NOV 20 | CAS Registry Number crossover limit increased to 300,000 in additional databases |
| NEWS 23 | NOV 20 | CA/CAplus to MARPAT accession number crossover limit increased to 50,000 |
| NEWS 24 | DEC 01 | CAS REGISTRY updated with new ambiguity codes |
| NEWS 25 | DEC 11 | CAS REGISTRY chemical nomenclature enhanced |
| NEWS 26 | DEC 14 | WPIDS/WPINDEX/WPIX manual codes updated |
| NEWS 27 | DEC 14 | GBFULL and FRFULL enhanced with IPC 8 features and functionality |

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8
NEWS X25 X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 09:15:40 ON 18 DEC 2006

=> file caplus
COST IN U.S. DOLLARS

| | SINCE FILE
ENTRY | TOTAL
SESSION |
|---------------------|---------------------|------------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'CAPLUS' ENTERED AT 09:15:47 ON 18 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Dec 2006 VOL 145 ISS 26
FILE LAST UPDATED: 17 Dec 2006 (20061217/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/infopolicy.html>

```
> reactive Distill?  
    300835 REACTIVE  
        151 REACTIVES  
    300940 REACTIVE  
        (REACTIVE OR REACTIVES)  
119520 DISTILL?  
164541 DISTD  
    1 DISTDS  
164541 DISTD  
    (DISTD OR DISTDS)  
25950 DISTG  
176262 DISTN  
    1781 DISTNS  
177001 DISTN  
    (DISTN OR DISTNS)  
376913 DISTILL?  
        (DISTILL? OR DISTD OR DISTG OR DISTN)  
L1      1117 REACTIVE DISTILL?  
        (REACTIVE(W) DISTILL?)
```

```
=> prereact?  
L2          1428 PRERACT?  
  
=> l1(l)l2  
L3          4 L1(L)L2
```

=> d 13 1-4 ti

L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
TI Method for producing dimethyl carbonate and ethylene glycol from ethylene carbonate and methanol continuously using pre-reactor

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
TI Esterification of a Fatty Acid by Reactive Distillation

L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
TI Conceptual design aspects of reactive distillation processes for ideal binary mixtures

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
TI Application of a fluidized reaction-distillation column for hydrolysis of methyl acetate

=> d 13 2-4 ti fbib abs

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
TI Esterification of a Fatty Acid by Reactive Distillation
AN 2003:469513 CAPLUS
DN 139:181931
TI Esterification of a Fatty Acid by Reactive Distillation
AU Steinigeweg, Sven; Gmehling, Juergen
CS Carl von Ossietzky University of Oldenburg, Industrial Chemistry, Oldenburg, D-26111, Germany
SO Industrial & Engineering Chemistry Research (2003), 42(15), 3612-3619
CODEN: IECRED; ISSN: 0888-5885.
PB American Chemical Society
DT Journal
LA English
OS CASREACT 139:181931
AB A reactive distillation process for the production of decanoic acid Me esters by esterification of the fatty acid decanoic acid with methanol is presented. The reaction was catalyzed heterogeneously by a strong acidic ion-exchange resin (Amberlyst 15). A pragmatic kinetic model based on a Langmuir-Hinshelwood-Hougen-Watson approach was derived and the kinetic consts. of this and a pseudohomogeneous model were fitted. Two different catalytic packings, Katapak-S and Katapak-SP, were used for reactive distillation expts. The separation efficiency of Katapak-SP was determined exptl. and reactive distillation expts. in pilot-plant columns were performed. Operation conditions were varied (reflux ratio and reactant ratio) exptl. An equilibrium stage model is capable of describing the expts. quant. when the adsorption based a kinetic model is applied. Simulation was used subsequently to determine the influence of important operating and design factors (reactant ratio, reflux ratio, pressure, distillate-to-feed ratio, size of the reactive section, and role of a prereactor) and to compare the packings systematically. Finally, a process is proposed that is promising for scale-up and optimization with regard to economic issues.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
TI Conceptual design aspects of reactive distillation processes for ideal binary mixtures
AN 2002:874569 CAPLUS
DN 138:58144
TI Conceptual design aspects of reactive distillation processes for ideal binary mixtures
AU Sundmacher, Kai; Qi, Zhiwen
CS Max-Planck-Institut fuer Dynamik komplexer technischer Systeme, Magdeburg, D-39106, Germany

SO Chemical Engineering and Processing (2003), 42(3), 191-200
CODEN: CENPEU; ISSN: 0255-2701
PB Elsevier Science B.V.
DT Journal
LA English
AB A comparative study on the conceptual design of reactive distillation process configurations is presented, considering the reversible reaction $A_1 \leftrightarrow A_2$ in an ideal binary mixture as simple model system. The analyzed flow schemes are a reactor-distillation column sequence with an external recycle loop, the same recycle system with a prereactor, a nonreactive distillation column on top of a reactive reboiler, a fully reactive distillation column, and a hybrid distillation column combining a reactive and a nonreactive section. For these configurations, the design aspects are discussed in terms of the most important operating parameters, kinetic parameters and design parameters.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
TI Application of a fluidized reaction-distillation column for hydrolysis of methyl acetate
AN 1997:373867 CAPLUS
DN 127:83057
TI Application of a fluidized reaction-distillation column for hydrolysis of methyl acetate
AU Han, S. J.; Jin, Y.; Yu, Z. Q.
CS Department of Chemical Engineering, Tsinghua University, Beijing, 100084, Peop. Rep. China
SO Chemical Engineering Journal (Lausanne) (1997), 66(3), 227-230
CODEN: CMEJAJ; ISSN: 1385-8947
PB Elsevier
DT Journal
LA English
AB A method for hydrolysis of MeOAc, a byproduct of poly(vinyl alc.) production, consists of a prereactor and a reactive distn column. The operating variables, including the feed rate, feed ratio of water to MeOAc and reflux ratio, were investigated. The conversion of MeOAc increases with increasing reflux ratio, but decreases with increasing feed rate. The feed ratio of water to MeOAc has a considerable effect on the conversion of MeOAc, and an optimum feed ratio was determined

=> logoff hold
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |

FULL ESTIMATED COST

18.61 18.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |

CA SUBSCRIBER PRICE

-2.25 -2.25

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 09:19:56 ON 18 DEC 2006